

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

*(10/10/03 entered 12/17/03)*

1. (Previously Presented) A method of detecting the presence or measuring the quantity of a target analyte in a sample reagent comprising: contacting a microfabricated electrochemical biosensor with the sample reagent, the microfabricated electrochemical biosensor comprising: (a) a substrate; and (b) at least two electrically conductive electrodes fabricated on the substrate by integrated circuit technology, each of the electrical conductive electrodes consisting of a single layer of an electrically conductive material; containing the sample reagent in contact with the conducting electrodes; measuring a electrical signal output from the microfabricated electrochemical biosensor; and determining from the signal output the presence and/or quantity of the target analyte in the sample reagent.
2. (Previously Presented) The method of claim 1, wherein the electrochemical biosensor includes an adhesive underneath each of the electrodes, the adhesive allowing for better adhesion of each of the electrodes to the substrate.
3. (Previously Presented) The method of claim 1, wherein the sample reagent is a biological fluid containing macromolecules.
- 4 (Previously Presented) The method of claim 1, wherein the sample reagent is a biological fluid containing ionic molecules or atoms.
5. (Previously Presented) The method of claim 1, wherein the substrate is selected from the group consisting of silicon, gallium arsenide, plastic and glass.
6. (Previously Presented) The method of claim 1, wherein the substrate comprises a material made out of silicon.